

Causes and Symptoms of Allergic Rhinitis in Children

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DESCRIPTION

A type of nasal irritation known as allergic rhinitis, or hay fever in its seasonal form, happens when the immune system overreacts to allergens in the environment. Runny or stuffy nose, sneezing, red, itchy, and watery eyes, and swelling around the eyes are all indications and symptoms of this condition. Normally, nasal discharge is clear. After exposure to an allergen, symptoms frequently appear minutes later and can impair one's ability to work, concentrate, or sleep. Some people could only experience symptoms at certain periods of the year, frequently as a result of exposure to pollen. Asthma, allergic conjunctivitis, and atopic dermatitis are common co-morbidities of allergic rhinitis.

Typically, environmental allergens like pollen, pet hair, dust or mould cause allergic rhinitis. Allergies are a result of both inherited genetics and environmental exposures. The fundamental mechanism involves Immunoglobulin E (IgE) antibodies that bind to an allergen and then cause mast cells to release inflammatory substances like histamine. As they attempt to expel the allergen, the mucous membranes in the nose, eyes, and throat swell up and become irritating. Skin pricks test or blood test for allergen-specific IgE antibodies are frequently used to make a diagnosis. But these tests could produce erroneous positive results. Although the common cold's symptoms are similar to those of allergies, they frequently persist longer than two weeks and, despite the name, usually do not include a fever.

Signs and symptoms

Dust and pollen are two examples of common airborne allergies. In these circumstances, symptoms develop in the eyes, nose, and lungs as well as other air-contact sites. For instance, allergic rhinitis, or hay fever, causes eye and nasal irritation as well as sneezing, itching, and redness. Inhaled allergens can also cause the lungs to produce more mucus, which can result in breathlessness, coughing and wheezing.

Aside from these environmental allergens, foods, insect stings, and reactions to drugs like aspirin and antibiotics like penicillin can all cause allergic reactions. Abdominal discomfort, bloating, vomiting, diarrhea, itchy skin, and hives are examples of food allergy symptoms. Rarely do food allergies result in rhinitis or asthmatic responses. Anaphylaxis, also known as a systemic allergic reaction, can be brought on by food, drugs, antibiotics, and insect stings. It can impact the digestive, respiratory, and circulatory systems among other organ systems. Anaphylaxis can cause skin rashes, bronchoconstriction, edema, low blood pressure, unconsciousness, and even death, depending on its severity. A delayed or abrupt onset is both possible for this kind of reaction.

Causes of allergic rhinitis

Allergic rhinitis occurs when the body's immune system reacts to an allergen in the air. Since the irritants (allergens) are so little, people can easily breathe them through the mouth or nose. Allergens typically do not cause harm to people. Hay fever, on the other hand, makes the immune system think that the allergen is invading. In an effort to protect the body, the immune system releases organic molecules into the bloodstream. The main component in this is histamine. The mucous membranes of the nose, eyes, and throat swell up and become itchy as they work to evacuate the allergen.

- Numerous allergens, such as the following, can cause seasonal and year-round allergies:
- Dust mites that reside in furniture, bedding, draperies, and carpets.
- Tree, grass, and weed pollen.
- Pet hair (tiny flakes of dead skin).
- Spores of mould.
- Cockroaches, along with their excrement and saliva.
- The nose and throat might become inflamed as a result of food allergies. Life possible, is known as biochemistry.

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